SMALL ARMS

REMINGTON MODEL 870 SHOTGUN

Overview

Introduction

As a Gunner's Mate, you will be required to demonstrate the proper use of the standard Coast Guard M870 12 GA Shotgun, train other personnel, and properly maintain it in accordance with all preventative maintenance requirements.

Objectives

2.1: Given the Navy 3M Planned Maintenance System (PMS) Maintenance Requirement Cards (MRCs), **PERFORM** maintenance on standard Coast Guard M870 12 GA Shotgun the standard service Coast Guard M870 12 GA Shotgun in accordance with COMDTINST M8000.2 (series), NAVSEAINST 4790.8 (series), Remington Model 870 Field Service Manual, and Remington Model 870 Instruction Book.

- 2.1.1: Given the applicable MRCs, required tools/materials, and standard service Coast Guard M870 12 GA Shotgun, **DISASSEMBLE** the small arms in accordance with the performance criterion checklist.
    - 2.1.1.1: Given an illustration of the standard service Coast Guard M870 12 GA Shotgun, **LABEL** the major parts/assemblies using correct nomenclature with 80% accuracy.
- 2.1.2: Given the applicable MRCs, required tools/materials, and standard service Coast Guard M870 12 GA Shotgun, **CLEAN** and **INSPECT** the small arms in accordance with the performance criterion checklist.
- 2.1.3: Given the applicable MRCs, required tools/materials, and standard service Coast Guard M870 12 GA Shotgun, **REASSEMBLE** the small arms in accordance with the performance criterion checklist.
- 2.1.4:Given references, applicable MRCs, and a Small Arms Log, **RECORD** the maintenance and inspections completed on the standard service Coast Guard M870 12 GA Shotgun in the Small Arms Log in accordance with the performance criterion checklist.

Overview

Objectives (Continued)

2.2: Given a malfunctioning service weapon, **TROUBLESHOOT** the standard service Coast Guard M870 12 GA Shotgun in accordance with COMDTINST M8000.2 (series), Remington Model 870 Field Service Manual, and Remington Model 870 Instruction Book.

- 2.2.1: Given a malfunctioning service weapon, **IDENTIFY** the malfunction on the standard service Coast Guard M870 12 GA Shotgun in accordance with the performance criterion checklist.
    - 2.2.1.1: Given incomplete statements concerning the cycle of operation for the standard service Coast Guard M870 12 GA Shotgun, without references, **COMPLETE** the statements with 80% accuracy.
- 2.2.2: Given a malfunctioning standard service Coast Guard M870 12 GA Shotgun, **DEMONSTRATE** corrective action on the service weapon in accordance with the performance criterion checklist.
- 2.2.3: Given a malfunctioning standard service Coast Guard M870 12 GA Shotgun, **PERFORM** effective repairs on the service weapon in accordance with the performance criterion checklist.
- 2.2.4: Given a repaired standard service Coast Guard M870 12 GA Shotgun, **PERFORM** a test on the service weapon in accordance with the performance criterion checklist.
- 2.2.5: Given a Small Arms Log, **RECORD** the corrective maintenance and repairs performed on the standard service Coast Guard M870 12 GA Shotgun in the Small Arms Log in accordance with the performance criterion checklist.

2.3: Given a malfunctioning service weapon, **PERFORM** immediate actions on the standard service Coast Guard M870 12 GA Shotgun in accordance with COMDTINST M8000.2 (series), Remington Model 870 Field Service Manual, and Remington Model 870 Instruction Book.

- 2.3.1: Given a malfunctioning standard service Coast Guard M870 12 GA Shotgun, **IDENTIFY** the malfunction for immediate action on the service weapon in accordance with the performance criterion checklist.
- 2.3.2: Given a malfunctioning service weapon, **PERFORM** immediate action on the standard service Coast Guard M870 12 GA Shotgun in accordance with the performance criterion checklist.
- 2.3.3: Given a repaired malfunctioning service weapon, **PERFORM** a test on the standard service Coast Guard M870 12 GA Shotgun in accordance with the performance criterion checklist.

Overview

Objectives (Continued)

2.4: Given the standard service Coast Guard M870 12 GA Shotgun with dummy rounds, **TRAIN** personnel in Small Arms Performance Qualification Standards (PQS) in accordance with COMDTINST M8000.2 (series) and Cutter Training and Qualification Manual, COMDTINST 3502.4 (series).

- 2.4.1: Using the applicable PQS checklist, as required by and contained in COMDTINST M8000.2 (series), **DEMONSTRATE** proper PQS for the standard service Coast Guard M870 12 GA Shotgun in accordance with the performance criterion checklist.

2.6: Given a prefire brief, standard service Coast Guard M870 12 GA Shotgun and ammunition, safely **OPERATE** the Coast Guard M870 12 GA Shotgun in accordance with COMDTINST M8000.2 (series), Remington Model 870 Field Service Manual, and Remington Model 870 Instruction Book.

- 2.6.2: Given a prefire brief on the Coast Guard Practical Riot Shotgun Course/Coast Guard Tactical Riot Shotgun Course, safely **FIRE** the service Coast Guard M870 12 GA Shotgun in accordance with COMDTINST M8000.2 (series).

Value to Students

Students will learn how to properly maintain, operate, and fire the standard Coast Guard M870 12 GA Shotgun in the performance of duties as a Gunner's Mate.

References

Coast Guard Ordnance Manual, COMDTINST M8000.2 (series)

Ship's 3-M Maintenance, Material, and Management Manual, NAVSEAINST 4790.8 (series)

Remington Model 870, Field Service Manual

Remington Model 870 Instruction Book

Section Contents

- Overview
- Safety
- Nomenclature
- Component Description
- Operation
- Summary

Safety

General

NOTE

Safety is first and foremost when handling all weapons.

1. All weapons shall be treated with respect.
2. When handling weapons **NEVER** point a weapon toward anyone or accept a weapon with the muzzle pointed toward you. Keep weapon pointed in a safe direction at all times. **NEVER** point a weapon at anything you don't intend to shoot.
3. Accept only a cleared weapon.
4. Each time you receive or pick up a weapon, ensure the weapon is clear by using the push-pull method.
5. Horseplay is unacceptable and will **NOT** be tolerated while handling a weapon.
6. Always be aware of your surroundings when handling weapons. Know what and who is around you.

Weapon Safety Rules

Everyone who handles weapons should memorize and recite verbatim the four weapon safety rules listed below. Training in the four safety rules must be repetitive to ensure automatic adherence when the individual is handling weapons.

1. Treat every weapon as if it were loaded, regardless of perceived or actual condition.
2. Keep weapon pointed in a safe direction at all times. **NEVER** point a weapon at anything you do not intend to shoot.
3. Keep your weapon on safe until aimed in on target and the decision to shoot has been made. (The standard service pistol is the only exception to this rule.)
4. Keep your finger outside the trigger guard, indexed along the receiver, until the decision to shoot has been made.

Safety

Clear Weapon

A **cleared** M870 is one with:

1. The safety is in the **On** position. Protruding out on the right side of the shotgun (looking down from the top).
2. The fore-end (action) to the rear (bolt open).
3. No brass or rounds in the chamber and no ammunition in the magazine tube.

NOTE

This is the only way you will GIVE, RECEIVE, or BENCH this weapon.

The Push-pull Method

To ensure that a weapon is clear, utilize the push-pull method.

1. With the weapon pointed in a safe direction and level to the deck, **PUSH** the weapon away from your body. Inspect the chamber of the weapon to, ensure the chamber is clear and contains no brass or ammunition. You should not see any obstructions in the barrel you should see light.

NOTE

The safe direction may depend on the area. This may mean you push-pull at an angle into a clearing station. The point to remember is that the weapon is pushed away from or brought into you without a rise or fall in the barrel.

2. With the weapon pointed in a safe direction and level to the deck, **PULL** the weapon towards your body and look into the magazine tube to ensure that no rounds remain and the weapon is clear.
3. Once you have determined it is clear, **"CHECK IT AGAIN"** to be sure that you were right the first time.

NOTE

Push-pull twice each time you pick up a weapon and each time you bench a weapon to ensure that it is clear regardless of perceived condition.

Nomenclature

General

The M870 12 GA Shotgun is a manually operated; pump action, single shot, shoulder-fired weapon with a parkerized metal finish.

It is equipped with a synthetic stock, with pistol grip and synthetic four-end. It has a 14-inch barrel with a tritium front bead sight and it is fitted with a rifled choke tube. The M870 is also equipped with an ACOG (Advanced Combat Optical Gun sight) Reflex sight. The ACOG sight is a tritium powered reflex dot sight (no batteries) that is to be used with both eyes open, allowing for rapid and accurate target acquisition in all light conditions.

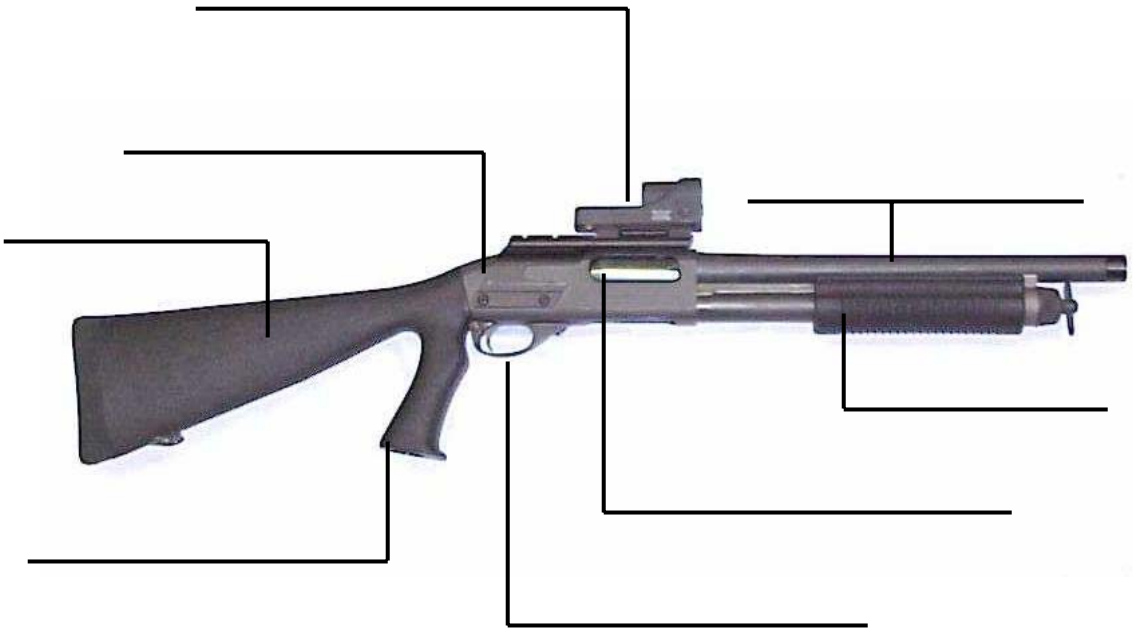
The shotgun is chambered for standard 2- 3/4 " and 3 " 12 GA shotgun shells, and is equipped with a four round magazine tube. It is also equipped with a front and rear sling swivels, for attachment of the standard web sling. Weight without sling: approx. 8 lbs. The shotgun length: 35 inches. Maximum range: 100 yards.

Nomenclature

Components

Major components:

- Pistol grip
- Stock
- Barrel
- Receiver
- Fore-end
- Trigger plate assembly
- Breech bolt and slide
- ACOG (Advanced Combat Optical Gun sight) Reflex sight

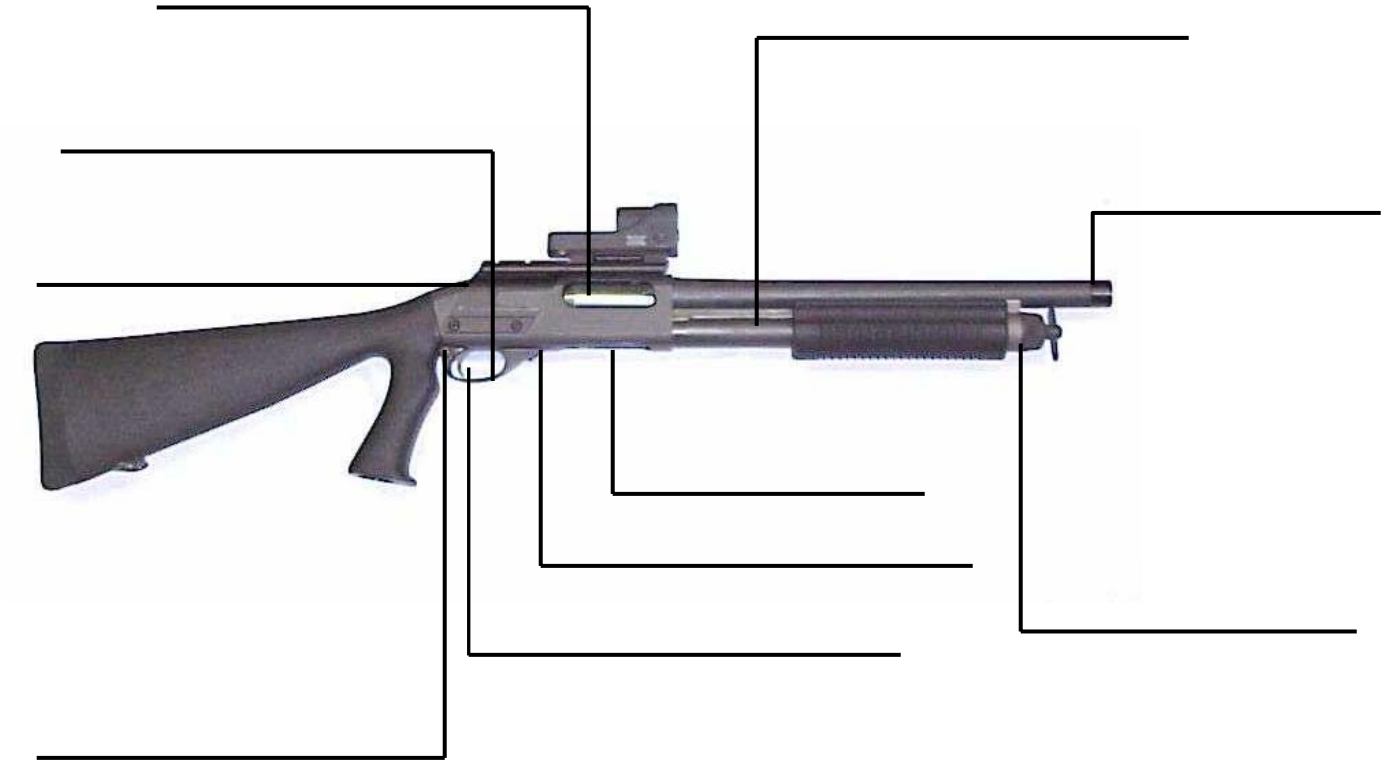


Nomenclature

Components

Other Components

- Rear grove sight
- Trigger guard
- Ejection port
- Magazine tube
- Front tritium bead sight
- Magazine cap
- Loading port
- Action bar lock
- Trigger
- Safety



Component Description

Receiver

Serves as a support for all major components.

It houses the breech bolt and slide. The receiver is the frame to which the rest of the weapon is assembled. Inside the receiver, there is room for the bolt to move back and forth and for shells to be lifted up from the magazine tube by the carrier. The rear of the receiver allows for the attachment of the butt stock. Components of the receiver include: **ACOG reflex sight, ejection port, magazine tube, magazine end cap, loading port, ejector, and shell latches**.

Component	Function
Magazine tube	Attached to the lower front of the receiver is the **magazine tube**, which contains a follower, magazine spring, magazine spring retainer and a **magazine end cap** that holds the rest of the parts in the tube. The magazine tube holds four rounds and feeds the rounds on to the carrier.
Magazine end cap	Holds the shotgun together.
Loading port	Found on the underside of the shotgun. Permits loading directly into the magazine tube, while keeping the weapon on target (tactical reload).
Shell latch	A right and a left **shell latch** are staked on the lower front, inside of the receiver, just aft of the magazine tube. The shell latches allow one round at a time to be fed onto the **carrier**.

Barrel

The M870 has a 14-inch barrel fitted with a rifled choke tube and a tritium front bead sight. The choke tube allows for increased accuracy when firing slugs and one-piece less lethal projectiles

Stock

The stock is a synthetic plastic stock with a molded pistol grip and an attached rubber butt plate. It is held on the receiver by a long bolt and washer that screws into the rear of the receiver.

Component Description

Fore-end Assembly

This is the "pump action" part of the shotgun. (Better known as the Action.)

1. The fore-end is made of synthetic plastic that is placed around a metal fore-end tube assembly.

2. The fore-end tube assembly has two action bars soldered on its upper rear end. These two action bars engage the slide and allow the bolt mechanism to be moved back and forth.

Bolt Assembly

Consists of the breech bolt that has the firing pin and spring, the extractor and the locking block. This last piece protrudes out of the top of the bolt and engages the rear the barrel to lock the bolt to the barrel.

Trigger Group

This unit contains a number of important subassemblies. It contains all the parts associated with the **trigger**, sear, and hammer assemblies. It also consists of the **safety, carrier assembly**, and the **action bar lock**.

Component	Function
Carrier	The **carrier assembly** acts like an elevator to lift the shells from the magazine into the path of the bolt.
Safety	The **safety** is of a cross bolt design. This is a **nonpositive safety**. This safety only blocks the operation of the trigger and does not effect the operation of the hammer.
Action bar lock	The **action bar lock** locks the action (fore-end) in the forward position for firing. It is also used to open an action for chambering the first round.

Operation

Cycle of Operation

The cycle of operation occurs in eight (8) basic steps.

1. Feeding
2. Chambering
3. Locking
4. Firing
5. Unlocking
6. Extracting
7. Ejecting
8. Cocking

Step	Action
_____	With a loaded magazine tube the shooter depresses the action bar lock, allowing the action to be moved rearward. The rearward movement of the fore-end carries the slide to the rear of the breech bolt. In passing to the rear of the breech bolt, the slide cams the locking block from the recoil shoulder of the barrel.
_____	At the same time, the rearward motion of the breech bolt forces the hammer downward engaging the sear.
_____	The completion of the rearward movement of the fore-end carries the breech bolt and slide to the rear of the receiver. This permits the left action bar to cam the left shell latch. This releases the next shell on to the carrier. At the same time the right shell latch, which is cammed into the magazine by the right action bar, intercepts the base of the next round in the magazine tube.
_____	The return movement of the fore-end will pivot the loaded carrier upward placing the shell in the path of the breech bolt. **As the shell is picked up, it is loaded into the chamber.** At the same time, the second shell being held by the right shell latch is released by the camming action of the returning right action bar. This shell is then intercepted and held by the left shell latch until the next feeding cycle.

Cycle of Operation (Continued)

Step	Action
_____	As the shell is loaded into the chamber, the action closes and the breech bolt is pushed home against the shell. Travel of the slide within the bolt continues and cams the locking block into the recoil shoulder of the barrel. The locking block secures the breech bolt firmly against the chambered shell and in turn is supported fully in the barrel by the slide. The action bar lock is then clear of the end of the left action bar and locks directly behind it.
_____	With the safety in the off position, the trigger may be pulled rearward. This rearward movement pivots the sear out of engagement with the hammer. The released hammer then rotates forward and strikes the firing pin. The firing pin in turn strikes the primer.
_____	The rearward movement of the fore-end after a shell is fired carries the slide to the rear of the breech bolt. In passing to the rear of the breech bolt, the slide cams the locking block from the recoil shoulder of the barrel.
_____	As the breech bolt continues rearward, it pulls the spent casing from the chamber.
_____	The extractor claw (on the right side) grips the rim of the shell tightly. As the fired shell clears the chamber, the base of the round engages the shoulder on the rear of the ejector spring that is located on the left side (inside) of the receiver. This causes the shell to pivot so that the front end of the shell is expelled through the open port.
_____	At the same time, the rearward motion of the breech bolt forces the hammer downward engaging the sear.

Operation

Cycle of Operation (Continued)

Step	Action
_____	The completion of the rearward movement of the fore-end carries the breech bolt and slide to the rear of the receiver. This permits the left action bar to cam the left shell latch. This releases the next shell on to the carrier. At the same time, the right shell latch, which is cammed into the magazine by the right action bar, intercepts the base of the next round in the magazine tube.
_____	The return movement of the fore-end will pivot the loaded carrier upward placing the shell in the path of the breech bolt. **As the shell is picked up, it is loaded into the chamber.** At the same time, the second shell being held by the right shell latch is released by the camming action of the returning right action bar. This shell is then intercepted and held by the left shell latch until the next feeding cycle.
_____	As the shell is loaded into the chamber, the action closes and the breech bolt is pushed home against the shell. Travel of the slide within the bolt continues and cams the locking block into the recoil shoulder of the barrel. The locking block secures the breech bolt firmly against the chambered shell and in turn is supported fully in the barrel by the slide. The action bar lock is then clear of the end of the left action bar and locks directly behind it.

What would be next? _____

Operation

Loading and Unloading

All loading and unloading of small arms should be accomplished on ranges or at designated clearing stations. Only unusual circumstances will require loading and unloading operations to be conducted at places other than the clearing station. If loading or unloading **MUST** be done outside a clearing area, the weapon **MUST** be kept pointed in a direction away from personnel or other vessels.

Training

All personnel who will carry them as part of their regular duties must learn the techniques of loading and unloading the service weapons. Those personnel shall be well drilled and understand the purpose of the training. Each unit shall have dummy cartridges on hand. Training with dummy cartridges shall be used at least quarterly and if required more frequently to keep the unit personnel at the highest level of proficiency.

WARNING

Ensure the weapon is pointed in a safe direction at all times and that your finger stays outside the trigger guard indexed along the receiver.

Loading

1. Always keep weapon pointed in a safe direction.
2. Ensure the safety is in the **SAFE** (protruding to the right as you look at the top of the weapon) **ON** position.
3. If needed, depress the action bar lock and move the fore-end (action) to the rear.
4. Utilizing the push-pull method, ensure the weapon is clear.
5. Run the fore-end (action) forward and place the weapon in the ready position.
6. With the safety in the **SAFE ON** position, load four rounds through the loading port into the magazine tube.

Operation

Method of Carry

1. Fore-end (action) forward.
2. Safety in the **SAFE** (protruding to the right as you look down at the top of the weapon) **ON** position.
3. Four rounds in the magazine tube.
4. Empty chamber.

Unloading

1. Ensure the **safety is in the SAFE** (protruding to the right as you look down at the top of the weapon) **ON position**.
2. Place the weapon on your LEFT hip, with the ejection port facing up.
3. Place you left hand on the fore-end with your little finger resting below the fore-end, between the fore-end and the receiver.
4. With your right hand, depress the action bar lock allowing the fore-end (action) to be released.
5. Slowly move the fore-end (action) downward toward the receiver.
6. When your little finger meets the receiver, **stop**.

NOTE

If a round has been chambered, it should begin to protrude from the ejection port. With your right hand, pull the round from the ejection port.

WARNING

If the round falls, DO NOT try to catch it. Let it fall. Your priority is to "Make the weapon safe."

Unloading (Continued)

SPECIAL NOTE

If a round is chambered in the field and a <u>clear area</u> can be found, you should clear the weapon in the previously stated manner (page 13). After removing the chambered round, move the fore-end (action) forward and reload the extracted round back into the magazine tube. The weapon has now been returned to the standard method of carry.

7. With your right hand, push the carrier inward to the **UP** position.

8. Put the thumb of your firing hand over the back of the round in the magazine tube and pull the fore-end fully to the rear. This will release the first round.

9. When the first round has been extracted from the magazine tube, depress the shell latch located on the right side of the receiver just inside and to the forward end of the loading port. This will release the second round from the magazine.

10. Depress the shell latch for each succeeding round until the weapon is empty.

<u>WARNING</u>

DO NOT cycle rounds through the chamber. Each time a round is chambered, there is a potential for accidental discharge.

11. Utilizing the push-pull method, ensure the weapon is clear.

Operation

Firing

In those situations where chambering a round is called for, the following procedure will be used:

1. Keep the weapon pointed in a safe direction and bring the weapon to your shoulder.

2. Depress the action bar lock located forward of the trigger guard with the trigger finger.

3. With a sharp, fluid movement bring the fore-end (action) fully to the rear and then fully forward. This must be accomplished in one swift and complete motion to ensure complete chambering of the round and proper operation of the weapon.

WARNING

Keep your finger outside the trigger guard indexed along the receiver and the weapon on safe until the decision to shoot has been made.

4. Once the decision to shoot has been made, sight in.

5. Place the safety to the **OFF** (protruding to the left side, flush on the right) position.

6. Put your finger inside the trigger guard.

7. "FIRE."

Operation

Stoppages

A stoppage is a failure of an automatic or semiautomatic weapon to extract a round, to eject a spent case, or to load or fire a new round. There are three basic types of stoppages:

1. A failure or malfunction of weapon.
2. A failure or malfunction of ammunition.
3. A failure or malfunction by the operator (operator error).

Weapon Failures or Malfunctions

Failures or malfunctions can range from "easy to correct" to "organizational maintenance required" or to "depot level level maintenance required."

Items such as dirty weapons, dirty magazines tubes, or unlubricated weapons can be repaired with proper maintenance.

Broken firing pins, broken loose or bent shell latches, and damaged action bars and receivers will require organizational maintenance.

Ammunition

Problems with ammunition can be categorized into three categories:

- Hangfires – Delay in propelling charge
- Misfires – Failure of propelling charge or primer
- Squib rounds

Operator Error

Improperly loaded magazine tube (rounds loaded backwards), safety in the **ON** position, and improper handling are caused by:

1. Improper training
2. Lack of training
3. Procedural short cuts
4. Lack of attention to detail
5. Adrenaline

Operation

Definitions

Hangfire

- A hangfire is a delay in the ignition of a propelling charge. The amount of delay is unpredictable, but in most cases will be a fraction of a second. In some cases, you may not notice the delay.

WARNING
During a hangfire, always KEEP the weapon is pointed in a safe direction.

Misfire

- A misfire is a complete failure of a propelling charge or primer to function. If a failure to fire (misfire) has occurred, **IMMEDIATE** action must be taken.

WARNING
During a misfire, always KEEP the weapon pointed in a safe direction.

Immediate Action

- Immediate action is the prompt action taken by the user to correct a stoppage.
- Immediate action should become instinctive to the user without the user attempting to discover the cause.
- Immediate action will correct most types of stoppages.

IF . . .	THEN . . .
Failure to eject (Stove Pipe)	Sweep cartridge out of the weapon with your reaction hand from underneath, cycle the fore-end (action), and attempt to resume firing.
Double feed	Move fore-end (action) all the way to the rear, dump or pry out loose rounds, attempt to chamber another round, and fire.
Hangfire	Keep weapon pointed in a safe direction. (Stay on target - a hangfire will go off or become a **misfire**.)
Misfire	Keep the weapon pointed in a safe direction. Cycle the fore-end (action) and chamber another round. Use a firm and complete pump action. Attempt to fire.

Operation

Squib Round

A squib round is a round of ammunition with little or no powder charge. This type of round is distinguished by a reduced audible pop or reduced recoil. Shooters **WILL NOT** take immediate action.

In case of a squib round, the weapon **SHOULD NOT BE FIRED**. The bore of the weapon must be cleared before shooting continues.

Troubleshooting

In situations where a weapon has malfunctioned and is not corrected by immediate action, troubleshooting procedures should be followed.

Troubleshooting procedures for the Remington M870 Shotgun can be found in:

- Remington M870 Field Service Manual
- Remington M870 Instruction/Owners Manual

Personal Qualification Standards (PQS)

References

(a) COMDTINST M8000.2 (series) - Chapter 17, Page 17-2,

(b) Remington M870 Owners Manual

NOTE

PQS must be accomplished at a semiannual interval for all Level II personnel and at an annual interval for Level III personnel. This task will be completed at least one (1) time without assistance (written or verbal) at the predescribed intervals.

Operation

PQS Checklist

1. Identify the following components and their purpose. Reference (a)
   a. Safety_____
   _____
   b. Action bar lock_____
   _____
   c. Magazine cap_____
   _____
   d. Fore-end_____
   _____
   e. Carrier_____
   _____
   f. Ejection port_____
   _____
   g. Magazine tube_____
   _____
   h. Shell latch_____
   _____
   i. Loading port_____
   _____
   j. Breech bolt and slide_____
   _____

2. Put the safety in **"SAFE**" position.
   Reference (a) Page 17-5, Note 2

3. Put the safety in **"FIRE"** position.
   Reference (a) Page 17-5, Note 2

4. Manually unlock the action when the weapon is cocked.
   Reference (a) Chapter 17 Page 17-5, Note 3

5.. Load/unload the shotgun.
   Reference (a) Chapter 8, Page 8-43, section 1.A, and 1.C

PQS Checklist (Continued)

6. Chamber a round.
   Reference (a) Chapter 8, Page 8-44, section 1.B

7. Determined if the weapon is unloaded.
   Reference (a) Chapter 8, Page 8-45 Note 2

8. Demonstrate the standard method for carrying the M870 shotgun.
   Reference (a) Chapter 8, Page 8-48

9. Demonstrate the procedure for firing the M870 from the loaded magazine and empty chamber condition.
   Reference (a) Page 17-5, Notes 2, 3, & 4

10. Fieldstrip and reassemble an M870.

11. Demonstrate the malfunction procedures for the M870.
    Reference (a) Enclosure 11 Page 4

Summary

Review

- Safety
- Nomenclature
- Component Description
- Operation
  - Cycle of Operation
  - Loading the Weapon
  - Standard Method of Carry
  - Unloading the Weapon
  - Firing the Remington M870 Shotgun
  - Corrective Action
  - PQS